



FCC IWG-**NINE!**
WRC-2000

Meeting Notice and Draft Agenda

The ninth meeting of FCC's informal working group **NINE!** on Regulatory/Procedural Matters will convene at 9:30 a.m., Thursday, April 1st (Honest!) in Room 1205 at the Department of State, 2201 C Street, NW, Washington, DC.

The draft agenda:

1. Approval of agenda
2. Introductions
3. Earth stations on board vessels
sc2-7_53916_ww7.doc from Norway
4. Other business

Admittance will be limited to the seating available. In this regard, entrance to the Department of State is controlled. Persons intending to attend this meeting should send a fax to (202) 647-7407, to the attention of Ms. Yvonne Seward not later than 24 hours in advance of the meeting. Please include the name of the meeting, your name, social security number, date of birth, and organization. One of the following valid photo identifications will be required for admittance: U.S. driver's license with your picture on it, valid U.S. passport, or an U.S. government identification. Enter via the C Street lobby.

Mark your calendars. Subsequent meetings of **NINE!**, thence the CPM Regulatory Committee, are:

5/6	6/3	7/1	8/5
9/2	10/7	10/21	11/4

at the Department of State.

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- For reasons of economy, these documents are printed in a limited number of copies. Participants are therefore kindly asked •
to bring their copies to the meeting since no others can be made available.



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Norway

**CONSIDERATIONS ON THE REGULATORY ASPECTS OF THE USE OF
EARTH STATIONS ON BOARD VESSELS IN THE BANDS
3 700-4 200 MHz AND 5 925-6 425 MHz**

Introduction

This contribution on WRC-2000 Agenda Item 1.8 has been developed and agreed in the framework of CEPT (Project Team 1 of ERC's Conference Preparatory Group).

This document proposes that the inclusion of earth stations on-board vessels in the bands 3 700-4 200 MHz and 5 925-6 425 MHz should be as a primary Maritime Mobile Satellite Service, but with a footnote in the allocations table reducing its status with regard to the Fixed Service.

1 Type of service corresponding to the proposed application and status of the service

The distinction made by the RR is that an earth station on-board a vessel is within the Maritime Mobile-Satellite Service (See **S1.29**).

Introducing the MMSS as a primary service without restrictions would mean that the coordination procedures of **S9.17** and **S9.18** have to be applied between ship earth stations and terrestrial stations (See Section 2).

Introducing the MMSS as a secondary service would mean that this type of application would be secondary to the FSS, which is probably not necessary.

Introducing the MMSS as a primary service with a footnote in Article **S5** reducing the status of this service with respect to terrestrial services is another possibility, which would avoid this difficulty. Such a footnote could be worded in the following way:

"In the frequency bands 3 700-4 200 MHz and 5 925-6 425 MHz, transponders on space stations in the Fixed-Satellite Service may be used, additionally, for transmissions in the Maritime Mobile Satellite Service. Such use is subject to the provisions specified in the procedures of Resolution xxx." Possible elements for such a resolution are provided in Section 5.

2 Coordination

The space coordination procedures provide an example of procedures applicable to radiocommunication stations, which are located in an area, which does not belong to any country in particular. In this case, **S9.11** and **S9.14** (coordination between a transmit space station and the administrations having terrestrial stations that could be affected) may provide an example of a procedure between one administration having a station located in an "international" area, and an administration having a station in its territory.

The coordination of ship earth stations while in motion with terrestrial stations, however, cannot be effected using specific ship earth stations, which would be located at fixed points, but would require the use of typical earth stations, which can be located anywhere at sea. Application of a coordination procedure, once successfully effected, would protect such a typical ship earth station anywhere at sea. However, this could restrict the development of terrestrial services by enabling a ship earth station cruising in any part of the international waters to claim protection from terrestrial stations in many countries.

As for **S9.11** and **S9.14**, the application of a coordination procedure on a first-come-first-served basis may entail the loss of sovereign rights in many respects for the administrations intending to use terrestrial services.

3 Limits

The use of limits provides in this case a preferable alternative. If the ITU-R studies indicate that beyond a minimum distance of x km (to be determined), there is no risk of unacceptable interference from a ship earth station, allowing the use of such earth stations beyond this distance from coasts would ensure coexistence of both services without the need for coordination.

Although the use of a pfd limit at the coast might provide a more accurate identification of the acceptable interference level, verification that such a limit is met would be difficult in practice. Therefore a limit specified in terms of a minimum distance expressed in kilometres from any coast is preferred.

As for most hard limits in the Radio Regulations, it would be possible to exceed this limit provided that prior agreement has been obtained from the concerned administration.

4 Application of Article S18

Whatever method is used (limits or coordination), a difficulty exists in respect of the possibility for an administration licensing such an earth station to ensure, in the event of the occurrence of harmful interference to a terrestrial station operated in accordance with the Radio Regulations, that this harmful interference will be stopped. This possibility is key to any administration fulfilling its obligations under Article **S18** and Article 19 of UNCLOS (United Nations Convention on the Law of the Sea).

For this purpose, it should be possible to determine the location of the ship earth station, either through the characteristics of the satellite network or through an interface with the ship's navigation system. It also should be possible to have the ability to switch off the satellite terminal immediately in case harmful interference into a terrestrial station occurs.

5 Resolution

In Section 1, the possibility of a Resolution is suggested. In view of the above, this resolution would have to specify:

5.1 In the case of transmissions from predetermined stationary points

- Coordination with terrestrial services has to be effected under **S9.17**.
- Coordination of terrestrial services with such earth stations has to be effected under **S9.18**.

5.2 In the case of transmissions involving ship earth stations while in motion

- That this application shall not cause harmful interference to, nor claim protection from, terrestrial radiocommunication stations operated in accordance with the Radio Regulations in these frequency bands.
 - That this application is limited to a minimum distance of x km (to be determined) from the coasts, unless prior agreement has been obtained from the concerned administrations.
 - That such ship earth stations shall be equipped so as to enable the administration licensing this station under the provisions of Article **S18** to perform:
 - a) The position determination and the identification of this earth station;
 - b) the remote switching off of its transmissions immediately upon request by an administration whose services may be affected.
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